THE REMOTE EFFECTS OF TYPHOID FEVER UPON THE BONES AND JOINTS.*

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IN THE short space of time allotted to me I will confine my remarks to the joints and spine only. Joint complications in typhoid fever are comparatively rare. Keen in 1898 was able to collect only 84 cases.

There are 3 types of arthritis complicating typhoid fever. 1st, where the typhoid germ alone attacks the joints; 2d, where there are also rheumatic complications, and, 3d, a mixed infection or septic type.

In the first instance, where the typhoid germ alone is present, the condition is usually monarticular, but may be polyarticular, the large joints, such as the hip, shoulder, knee and elbow, being usually involved, and especially the hip, which frequently becomes dislocated through muscular action subsequent to the distension of the capsule. The joints seldom suppurate or become ankylosed, the treatment for this type being preventing of faulty positions, rest in bed, splints or traction. The prognosis is generally good.

The 2d or rheumatic type frequently results in ankylosis and deformity in spite of all the preventive measures which may be employed, and frequently correcting operations are imperative.

The 3d or septic variety ordinarily appears following a virulent form of typhoid where there has been either extensive intestinal ulceration, bed sores or abscesses, and a marked degree of lowered vitality. In this form suppuration is usual, and develops early. The prognosis is bad, the mortality being about 80%.

The typhoid spine (Gibney), a painful affection of the spine unattended by angular deformity. During the course of, or during convalescence from, typhoid fever, and occasionally after apparent recovery from the disease, symptoms of pain and stiffness of the back may appear. These are apparently caused by secondary infection of the fibrous coverings and attachments of the spine similar to the more common but more severe forms of periostitis of the tibia or other bones from the same cause. There is usually pain on motion and pain on pressure over the affected vertebræ. (Whitman.)

There are 3 distinct conditions of the spine which may arise after typhoid fever: 1st, the true perispondylitis of Gibney; 2d, a painful condition of the muscles of the spine, resulting from a mechanical strain or injury, and which is not a perispondylitis; 3d, the hypersensitive, neurasthenic, painful spine which is merely a neurosis, and consequently not based upon the same pathological findings.

In most cases there is no history of injury, but this has been present in some. The pain is usually in the lumbar region, intense, sharp and shooting in character, and is comparatively bearable so long as the patient is lying flat upon his back, but is much aggravated by any movement of the spine, either anteroposteriorly or laterally, even turning in bed is extremely painful, and it is only by making a muscular effort and fixing the spine by all the voluntary muscles that it can be accomplished, and then only by aid of the nurse. Deformity is present more or less marked in every case where a true pathological lesion could be considered; but in those cases where the neurotic element far outbalances the local conditions, this is not seen.

Osler reports a case, man, aged 24, after convalescing from typhoid fever, had some pain in his back, but was up and about, and even able to play tennis. After a fall, he suffered excruciating pain in the lumbar region, and could only rest in the recumbent posture. Deep pressure over the iliac region of the left side and anterio-posterior motion caused excessive pain. There was some fever. These symptoms continued from the end of November to January, and it was March before he was well. (W. J. Taylor.)

In recent correspondence with Dr. John Ridlon of Chicago, he stated that he had seen at least 3 cases of typhoid spine in the last 2 years. One of these patients, after spending several months in bed, had a spinal brace applied, and was sent to Southern California, where he remained some months and made a good recovery. It seems that this young man got to work too soon after having had typhoid, and this spinal difficulty followed.

Another patient gave a similar history, but had the tarsal joints also affected. This patient remained in bed 3 or 4 months, did not wear a brace, and is now well.

*Read at the Thirty-fifth Annual Meeting of the State Society, Riverside, April, 1905.

COUNCIL ON PHARMACY AND CHEMISTRY.

American Medical Association.

OFFICIAL REPORT OF ACETANILID MIXTURES.

The following report has been approved by the Council:

To the Council on Pharmacy and Chemistry of the American Medical Association:

In response to the request of your chairman we have investigated the below-mentioned preparations and report as follows:

Specimens of the articles were bought in different cities in the open market, and in original, sealed packages, and were analyzed by some of us or under our direction. Each article was examined by at least two chemists, and some were subjected to several analyses. While certain of the preparations are represented as being chemical compounds, the specimens examined were all found to be mixtures; the principal ingredient being acetanilid. The percentage proportions of acetanilid given below are the minimum obtained by any of the analysts.

Soda and ammonia combined with carbonic acid, are calculated and reported as sodium bicarbonate and as ammonium carbonate (U. S. P.), respectively. Salicylic acid is calculated and reported as sodium salicylate. Diluents and other constituents than those reported were not determined.

AMMONOL.

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid.	Sodium Bicarb.	Ammonium Carb.
50.	25.	20.

ANTIKAMNIA.

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingrelients approximately in the proportions given:

Acetanilid	Caffein	Citric Acid	Sodium Bicarb.
68.	5.	5.	20.

KOEHLER'S HEADACHE POWDERS.

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Caffein
76.	22.

ORANGEINE.

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Sodium Bicarb.	Caffein.
43.	18.	10.

Other constituents said to be present were not determined.

PHENALGIN.

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Sodium Bicarb.	Ammonium Carb.
57.	29.	10.

Certain packages of phenalgin were purchased which on analysis did not show ammonium carbonate.

SALACETIN.

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Sodium Bicarb.	Sodium Salicylate
43.	21.	20.

We recommend that this report be printed in *The Journal of the American Medical Association.*

Respectfully Submitted,

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Committee on Chemistry, Council on Pharmacy and Chemistry of the A. M. A.